

Q1: Write steps to make a sprit walk to the edge with different sprit's costumes then bounce in the same direction.. when the green flag is clicked.

Steps:

- From Event Blocks
 - drag (when green flag is clicked)
- From Motion Blocks
 - drag (set rotation style left to right)
- From Control Blocks
 - drag (Repeat forever block)
 - From Motion blocks.. drag (Move 10 steps)
 - From Look blocks.. drag (next costume)
 - From Control blocks.. drag (Wait 0.1 second)
 - From Motion blocks.. drag.. (If on edge, bounce)



Q2: Write steps to make a sprite go to different four directions when four arrows are clicked.

Steps:

1. From Event blocks drag (When the up arrow key is pressed)
 - From Motion Block:
 - drag (Point in direction up 0)
 - drag (Move 100 steps)
2. From Event blocks drag (When the down arrow key is pressed)
 - From Motion Block:
 - drag (Point in direction down 180)
 - drag (Move 100 steps)
3. From Event blocks drag (When the left arrow key is pressed)
 - From Motion Block:
 - drag (Point in direction left -90)
 - drag (Move 100 steps)
4. From Event blocks drag (When the right arrow key is pressed)
 - From Motion Block:
 - drag (Point in direction right 90)
 - drag (Move 100 steps)





Q3: Write steps to draw a red line with size 10.

Steps:

1. From **Event blocks** drag (When the space key is pressed)
2. From **Pen blocks** drag (Clear)
 - Then drag (pen down)
 - Then drag (set pen color to ◻)
 - Then drag (set pen size to 10)
3. From **Motion blocks** drag (move 200 steps)



Q4: Write steps to draw a circle.

Steps:

- 1- From **Event blocks** drag (when green flag clicked)
- 2- From **Pen blocks** drag (clear)
 - Then drag (pen down)
- 3- From **Control blocks** drag (repeat 72)
- 4- From **Motion blocks** drag (move 10 steps)
 - Then drag (turn 5 degrees)



Q5: Write steps to draw a triangle.

Steps:

- From **Event blocks** drag (when green flag clicked)
- From **Pen blocks** drag (clear)
 - Then drag (pen down)
3. From **Control blocks** drag (repeat 3)
4. From **Motion blocks** drag (move 200 steps)
 - Then drag (turn 120 degrees)



Q6: Write steps to play a sound when a cat touches a dog.

Steps:

- Add a new sprite from library (dog2)
- From **Event blocks** drag (when green flag clicked)
- From **Control blocks** drag (forever)
- From **Motion blocks** drag (move 10 steps)
- From **Control blocks** drag (wait 0.1 secs)
 - Then drag (If then block)
 - From **Sense blocks** drag (touching dog2)
 - From **sound blocks** drag (play sound meow)



Q7: Write steps to draw a square.

Steps:

- From Event blocks drag (when green flag clicked)
- From Pen blocks drag (clear)
 - Then drag (pen down)
- From Control blocks drag (repeat 4)
- From Motion blocks drag (move 100 steps)
 - Then drag (turn 90 degrees)



Q8: Write steps to draw a hexagonal.

Steps:

- From Event blocks drag (when green flag clicked)
- From Pen blocks drag (clear)
 - Then drag (pen down)
- From Control blocks drag (repeat 6)
- From Motion blocks drag (move 100 steps)
 - Then drag (turn 60 degrees)



Note:

$$\text{Angle of rotation} = \frac{360^\circ \text{ degrees}}{\text{number of ribs}}$$

زاوية الدوران = $\frac{360^\circ \text{ درجة}}{\text{عدد الأضلاع}}$